



U.S. Department of Energy
Office of River Protection

P.O. Box 450
Richland, Washington 99352

02-OSR-0245

Mr. Ron F. Naventi, Project Manager
Bechtel National, Inc.
3000 George Washington Way
Richland, Washington 99352

Dear Mr. Naventi:

CONTRACT NO. DE-AC27-01RV14136 - APPROVAL OF BECHTEL NATIONAL, INC (BNI)
AUTHORIZATION BASIS CHANGE NOTICES 24590-WTP-ABCN-ESH-01-009, REV. 0,
AND 24590-WTP-ABCN-ESH-02-010, REV. 0

- References:
1. BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmitted for Approval: Contract Deliverable "Revised Standards Approval Package" and Associated Authorization Basis Change Notices in Support of the "SRD Standards Approval Package Submittal," CCN: 026385, dated January 15, 2002.
 2. BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmitted for Approval: Authorization Basis Change Notices 24590-WTP-ABCN-ESH-02-001, Revision 0, 24590-WTP-ABCN-ESH-02-010, Revision 0, 24590-WTP-ABCN-ESH-02-013, Revision 0, and 24590-WTP-ABCN-ESH-02-015, Revision 0, CCN: 029186, dated May 1, 2002
 3. ORP letter from R. C. Barr to R. F. Naventi, BNI, "Office of Safety Regulation (OSR) Questions on Low Activity Waste Construction Authorization Request and Related Submittals," 02-OSR-0109, dated March 14, 2002.

The U.S. Department of Energy, Office of River Protection, Office of Safety Regulation (OSR) has reviewed Authorization Basis Change Notice (ABCN) 24590-WTP-ABCN-ESH-01-009, Revision 0, in Reference 1, and ABCN 24590-WTP-ABCN-ESH-02-010, Revision 0, in Reference 2. The proposed changes consist of the following:

ABCN 24590-WTP-ABCN-ESH-01-009, Rev 0, proposes changes to the Safety Requirements Document (SRD) Implementing Codes and Standards of Safety Criteria (SC) 5.3-4 and 5.3-5. This amendment deletes the implementing standards of ERDA 76-21, "Nuclear Air Cleaning Handbook" and ACGIH 1988, "Industrial Ventilation, A Manual of Recommended Practice," In SRD Safety Criterion 5.3-4 the Implementing Code and Standards are replaced with reference to the Washington Administrative Code standard, WAC 246-247-120, "Radiation Protection-Air Emissions." In response to this ABCN, the OSR reviewers requested more information, sent to the Contractor as Question

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ABCN-ESH-01-009-01, Reference 3. The OSR reviewers had a concern that the retained and revised implementing codes and standards in SC 5.3-4 and 5.3-5 would not be sufficient to ensure that the requirements of the SC are met. The Contractor adequately addressed this concern in their response to the question.

ABCN 24590-WTP-ABCN-ESH-02-010, Rev 0, proposes changes to several sections of the SRD. The proposal includes: (1) revisions to SRD Safety Criteria 4.0-1, 4.0-2, 4.0-3, and 4.1-2 to clarify the applicable revision of implementing standard ISO 10007: 1995 (E); (2) revisions to SRD Appendix C, *Implementing Standards*, to clarify the applicable revision of implementing standard to ISO 10007: 1995 (E); (3) revisions to SRD Appendix C, *Implementing Standards*, to correct references used in the tailoring details; and (4) revisions to SRD Appendix C, *Implementing Standards*, to add tailoring details to explain deletion Section 7.3, *Configuration board*, of ISO 10007: 1995 (E). This amendment reflects modifications to the SRD resulting from the Contractor's implementation of the industry standard on Configuration Management.

Based upon OSR's evaluation of the proposed changes, OSR has found the proposed changes to the above ABCNs acceptable. OSR has concluded that there is reasonable assurance that the health and safety of the public and the workers, and the environment will not be adversely affected by those changes, and that they comply with applicable laws, regulations, and RPP-WTP contractual requirements. Attached is OSR's Safety Evaluation Report for the proposed changes.

As part of the amendment implementation process, please submit within 14 days of receipt of this letter the revised pages of the SRD, identifying all revisions to date. This amendment is effective immediately and shall be fully implemented within 30 days, i.e., the provisions of the amendment may be used immediately; within 30 days, controlled copies of the SRD, and subordinate documents must be modified to reflect the changes associated with this amendment.

If you have any questions please contact Dr. Walter Pasciak, OSR, (509) 373-9189. Nothing in this letter should be construed as changing the Contract, DE-AC27-01RV14136. If, in my capacity as the Safety Regulation Official, I provide any direction that your company believes exceeds my authority or constitutes a change to the Contract, you will immediately notify the Contracting Officer and request clarification prior to complying with the direction.

Sincerely,

Robert C. Barr
Safety Regulation Official
Office of Safety Regulation

OSR:WJP

Attachment

**Safety Evaluation Report (SER)
Of Proposed Authorization Basis Change Notice
24590-WTP-ABCN-ESH-01-009, Revision 0
24590-WTP-ABCN-ESH-02-010, Revision 0
To the Safety Requirements Document
For the River Protection Project-Waste Treatment Plant
By the Office of Safety Regulation**

1.0 INTRODUCTION

The River Protection Project-Waste Treatment Plant (RPP-WTP) authorization basis (AB) is the composite of information, provided by the Contractor in response to radiological, nuclear, and process safety requirements, that is the basis on which the Office of Safety Regulation (OSR) Safety Regulation Official grants permission to perform regulated activities. The AB includes that information requested by the Contractor for inclusion in the AB and subsequently accepted by OSR. The AB for the RPP-WTP includes, in part, the Safety Requirements Document (SRD). The SRD contains the approved set of radiological, nuclear and process safety standards and requirements, which if implemented, provide adequate protection of workers, the public, and the environment against the hazards associated with the operation of the facility. By letters dated January 15, 2002, and May 1, 2002, Bechtel National, Inc., (the Contractor) submitted proposed amendments to the SRD. This SER documents OSR's evaluation of the amendments proposed by the Contractor contained in ABCNs: 24590-WTP-ABCN-ESH-01-009, Rev 0, and 24590-WTP-ABCN-ESH-02-010, Rev 0.

2.0 BACKGROUND

The SRD contains the set of radiological, nuclear, and process safety standards necessary to ensure adequate protection of the health and safety of workers, co-located workers, the public, and the environment from radiological, nuclear, and process hazards. The SRD standards are developed and subsequently implemented via an iterative process. Included in the development process is a continuing review of industry practices, particularly those referenced in the SRD, and review of the results of the process hazards and accident analyses as they evolve with the design of the facility for potential impacts on the SRD standards used to ensure protection of the public, workers, and the environment.

ABCN 24590-WTP-ABCN-ESH-01-009, Rev 0, proposes changes to SRD Implementing Codes and Standards of Safety Criteria 5.3-4 and 5.3-5. This amendment deletes the implementing standards of ERDA 76-21, "Nuclear Air Cleaning Handbook" and ACGIH 1988, "Industrial Ventilation, A Manual of Recommended Practice." In SRD Safety Criterion 5.3-4, these Implementing Code and Standards are replaced with reference to the Washington Administrative Code standard, WAC 246-247-120, "Radiation Protection-Air Emissions."

ABCN 24590-WTP-ABCN-ESH-02-010, Rev 0, proposes changes to several sections of the SRD. The proposal includes: (1) revisions to SRD Safety Criteria (SC) 4.0-1, 4.0-2, 4.0-3, and 4.1-2 to clarify the applicable revision of implementing standard ISO 10007: 1995 (E); (2)

revisions to SRD Appendix C, *Implementing Standards*, to clarify the applicable revision of implementing standard to ISO 10007: 1995 (E); (3) revisions to SRD Appendix C, *Implementing Standards*, to correct references used in the tailoring details; and (4) revisions to SRD Appendix C, *Implementing Standards*, to add tailoring details to explain deletion Section 7.3, *Configuration board*, of ISO 10007: 1995 (E). This amendment reflects modifications to the SRD resulting from the Contractor's implementation of the industry standard on Configuration Management. In implementing ISO 10007, the Contractor chose to not establish a configuration board. The functions and responsibilities equivalent to a configuration board already existed in plans and procedures which implement configuration management. The Contractor also clarified which revision of the standard would be used as the implementing standard. Clarifying the revision that applies to the RPP-WTP should avoid confusion when a new revision to the standard is released. This will also ensure consistency among other AB documents. In this particular case, the Integrated Safety Management Plan (ISMP), Section 1.3.16, *Configuration Management*, specifies the version of the ISO standard that will be used on the project. This amendment provides consistency between the SRD and the ISMP.

OSR's evaluation of the proposed changes to the SRD is documented in the following sections of this Safety Evaluation Report.

3.0 EVALUATION

3.1 24590-WTP-ABCN-ESH-01-009, Revision 0

Proposed changes to SRD Implementing Codes and Standards for SC 5.3-4 and 5.3-5

Proposed changes to SRD Volume II, Safety Criterion (SC) 5.3-4 and 5.3-5, "Implementing Codes and Standards:" Delete "ACGIH 1988, Industrial Ventilation, A Manual of Recommended Practice, 20th Edition, American Conference of Governmental Industrial Hygienists" and "ERDA 76-21, Nuclear Air Cleaning Handbook." In response to this proposed ABCN, the OSR reviewers requested more information, sent to the Contractor as Question # ABCN-ESH-01-009-01. The OSR reviewers had a concern that the retained and revised Implementing Codes and Standards in SC 5.3-4 and 5.3-5 would not be sufficient to ensure that the requirements of the SC are met. The Contractor adequately addressed this concern in their response to the question.

Evaluation: (Acceptable)

The revision is acceptable because the Contractor provided sufficient information to demonstrate the remaining Implementing Codes and Standards would continue to implement Safety Criterion 5.3-4 and 5.3-5. In addition, the Contractor provided sufficient information for SC 5.3-4 to provide assurance that the equipment will maintain control over radioactive materials during normal operations and anticipated operational occurrences as a result of hazardous chemical effects of the effluents on the equipment that could foreseeably occur. This meets the criteria specified in SC 3.1-2 and 3.1-3 that address hazards analysis for radioactive materials and process chemicals and their interrelationships.

3.2 24590-WTP-ABCN-ESH-02-010, Revision 0

Proposed changes to SRD SC 4.0-1, 4.0-2, 4.0-3, and 4.1-2

Clarify the revision of the implementing codes and standard to ISO 10007: 1995(E) Quality Management – Guidelines for Configuration Management.

Evaluation: (Acceptable)

This change is acceptable because the ISO revision cited coincides with the revision cited in ABAR-W375-99-0003. This ABAR was reviewed and accepted by the OSR in a letter dated June 24, 1999. Clarifying what revision applies on the RPP-WTP will avoid confusion when a new revision to standard is issued. The above revision is the one cited in the ISMP Section 1.3.16, *Configuration Management*. Specifying the revision in the SRD will provide consistency among AB documents.

Proposed change to SRD Appendix C, *Implementing Standard*, tailoring detail for Page 1, Section 1, *Scope*

Change the tailoring Statement and justification for ISO 10007:1995(E) Page 1, Section 1, *Scope*, from “replace” to “delete” in the last sentence in the second paragraph and replace the justification to read as follows:

Justification: The WTP project has not adopted ISO 9001, ISO 9002, ISO 9003 and ISO 9004 as implementing standards.

Evaluation: (Acceptable)

The revision is acceptable because it editorially corrects tailoring of ISO 10007:1995(E) through ABAR-W375-99-0003 which made reference to the *Quality Assurance Implementation Plan*, BNFL-5193-QAP-01 (QAPIP). The BNFL QAPIP has been superseded and replaced by 24590-WTP-QAM-QAA-01-001, *Quality Assurance Manual (QAM)*. The QAM does not address configuration management except software configuration management. The original tailoring statement is no longer correct.

Proposed editorial changes to SRD Appendix C, *Implementing Standard*, in tailoring detail and justification statements

Change the term “QAP” to “QAM” in two tailoring justification statement for ISO 10007:1995(E) Page 1, Section 2, *Normative References*, and ISO 10007:1995(E) Page 8, Section 8, *Configuration Management System Audit*; and change “RPP-WTP QAPIP” to “Quality Assurance Manual” on page C-2 in the tailoring statement for ISO 10007:1995(E) Page 8, Section 8.

Change the word “Plant” to “Plan” and change “CMP” to “CM Plan” in the heading for ISO 10007:1995(E) Page 7, Section 7.7.

Evaluation: (Acceptable)

The revisions are acceptable because they editorially correct the justification statements and the tailoring statement to reflect the approved *Quality Assurance Manual (QAM)*, 24590-WTP-QAM-QA-01-001. The QAM supersedes the QAP and the QAPIP referred in to in the justification statement.

The revisions are acceptable because they correct typographical error (Plant to Plan) and change *CMP* to *CM Plan* to be consistent with the *RPP-WTP Configuration Management Plan* (24590-WTP-PL-MG-01-002) abbreviation for configuration management plan.

Proposed change to SRD Appendix C, *Implementing Standard*, to add tailoring and justification statements

Change the pages C-1 and C-2 of SRD Appendix C to add five tailoring and justification statements related to the deletion of ISO 10007:1995(E), Page 5, Section 7.3, *Configuration Board*. The following justification statements were added to Appendix C to support the deletion of Section 7.3, *Configuration Board*:

- Page 1, Section 3, Definitions
- Page 4, Section 6.2, Structure of Configuration Management
- Page 5, Section 7.3, Configuration Board
- Page 9, Annex A, Section A2, Policies and procedures
- Page 9, Annex A, Section A4, Configuration Control

Evaluation: (Acceptable)

Deletion of Section 7.3, *Configuration Board* is acceptable because the ISO standard offers the establishment of a configuration board as an option. The standard uses the term “may” versus the term “should” for this clause of the standard. The OSR has previously taken the position that the term “should”, commonly used in standards, will be interpreted as mandatory requirements and that the term “may” represent non-mandatory requirements. In addition, the ABCN provides a matrix that demonstrated the functions and responsibilities described in Section 7.3 of the ISO standard were equivalently covered in plans and procedures that implement configuration management. The proposed changes to Appendix C remove configuration board references throughout ISO 10007:1995(E) to reflect and clarify RPP-WTP practices and intentions.

4.0 CONCLUSION

Based on OSR’s evaluation of the proposed changes, described above, the OSR has found the proposed changes to be acceptable, and has concluded that there is reasonable assurance that the health and safety of the public and the workers, and the environment will not be adversely affected by the proposed changes. Furthermore, OSR has determined that the proposed changes comply with applicable laws, regulations, and RPP-WTP contractual requirements.